

FREEDOM OF EXPRESSION

The Stick* fulfills a musician's aspiration to play bass lines, keyboard harmonies, and lead instrumental lines, all at the same time.

The long free melody lines of jazz guitar, and the blazing expression of rock lead, can be structured from the bass on up through the chords, giving harmonic meaning and rhythmic depth to the melody.

The bass is strong and supportive, with the bottom drive of electric bass and the high frequency attack and overtones of acoustic bass. The chordal possibilities are as free, polytonal, and infinite, as those available to the keyboard artist.

* THE STICK and THE CHAPMAN STICK TOUCHBOARD are registered trademarks of Stick Enterprises, Inc.

PERFORMANCE

The Stick is designed for a two-handed tapping technique, each hand independently playing lines or chords. While the left hand plays bass and chords, the right hand, freed from its picking and strumming roles, can play an infinite variety of melodic and chordal ideas.

To play a single note, a finger lightly taps and holds a string against a fret, causing the string to strike the fret and to vibrate subtly between that fret and the bridge. This tapping action initiates the vibration energy (metal string hitting

metal fret), and also determines the string's vibrating length, or pitch. On other stringed instruments, such as guitar, the left hand finds the vibrating length, and the right hand generates the energy. A light tap with one finger does both jobs on The Stick.

The string vibration then disturbs the magnetic field of the underlying pick-up, creating an audio signal at the induction coil of the pick-up. This system is similar to electric guitar, with no pre-amps and no electronically activated frets.

Tapping lightly or heavily for dynamics, the finger technique is similar to piano, but with generally a much lighter touch.

Hundreds of finger effects, added to the basic tapping technique, give



the notes expression. Bending and vibratos change string tension. Sliding and glisses change string vibrating length.

Exploring basic techniques on Stick, Emmett has established several basic approaches to the instru-

ment, rivaling piano in musical versatility. A bass line can be played in the

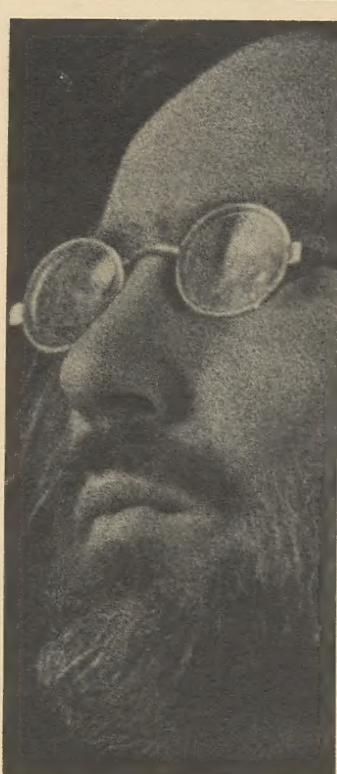
left hand, while melody is played in the right. The bass can be a percussive pattern or a creative contrapuntal entity.

Chordal techniques are variable. Left-hand chords can be played on the bass strings for a smooth flow of rhythm and harmonic accompaniment, without interference to the melody line.

Left-hand chords can be played on the melody strings for fills and expressive accents. Or they can be played on both sets of strings at once for colorful, close-interval voicings. For even more richness, chords can be played with both hands, with unlimited possibilities for tonal and atonal voicings. The right hand can also play chords, articulating songs and themes, piano style. All the right hand expressive techniques (bending, sliding, vibrato) can be applied to these chords.

Holding and tapping are the essential elements of the basic technique, and constitute a totally unique approach to

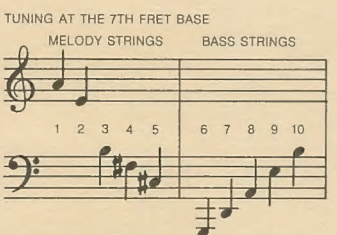
playing a stringed instrument. The tapping action is the rhythmic element, causing the sharp attack sound on each note. The holding action is the singing, melodic element, causing each note to have a duration, or sustain.



TUNING

The tuning of the strings is set up for two hands playing inde-

pendently on one fret-board, the hands engaging the board from opposite sides.



TUNING AT THE 7TH FRET BASE		
	MELODY STRINGS	BASS STRINGS
1st	D above middle C	A above middle C
2nd	A below	E below
3rd	E below	B below
4th	B below	F# below
5th	F# below	C# below

ASCENDING FIFTH INTERVALS		
6th	C below low bass E	G above low bass E
7th	G above	D above
8th	D above	A above
9th	A above	E above
10th	E above	B above

The ten strings are divided into two groups of five. The first group is for melody and chords, the sequence of five strings tuned in descending perfect fourth intervals, starting with open first string D above middle C (see illustrations). The second group is for bass and chords, its five strings reciprocally tuned in ascending perfect fifth intervals, starting with open sixth string C below lowest E on a bass.

The uniform tuning of fourths in the melody strings is like guitar, except for guitar's major third interval between

second and third strings. The reciprocal uniform tuning of fifths in the bass starts with the lowest pitched string situated

nearest the middle of the fret-board width, and highest string

nearest the edge. The fifths moving in one direction produce the same lettered notes as fourths in the opposite direction, but with the pitches in contrary motion. The sequence of ten strings is arranged for easy transposition of chords and lines, without change of shape, across the fret-board as well as along it, creating a chessboard environment for pattern playing. Chords, octaves, and other intervals all have unaltered and constant shapes on all combinations of strings. Entire blocks of two-handed musical ideas, including bass, chords, and melody, can move across the board and along it.

Root positions on Stick bass strings fall into the same patterns as on regular electric bass in fourths, with only the pitch reversed (the 10th, 9th, 8th and 7th strings are respectively tuned, E, A, D and G). But the language of the bass in fifths is open, encouraging wide interval leaps in the line, as well as chordal structures with low bass and mid-register chords played together.

The low, supporting bass strings are toward the middle of the sequence of ten strings, so that the left hand can hold a bass note while easily reaching for chords on either or both groups of strings.

The left hand on the bass strings can easily grasp two and a half octaves over a span of four frets. Five or six frets cover most of the bass and cello range in the left hand, making room for the other hand to play on the same fret-board.

The Stick tuning concept of uniform fourths in the melody and reciprocal fifths in the bass gives the instrument a pervading neutrality, freeing the player to create what he conceives.

COMPONENTS

The Stick has reached a plateau in its development and manufacture, where each instrument is uniformly ideal in

workmanship and playability. A beautiful and dense Brazilian iron wood is immaculately hand-finished and fitted with the largest sized frets, with mother-of-pearl inlays, with hard black anodized metal components (the pick-up housing, belt-hook, tail-piece, and the

nut), with smooth winding heads, and with specially engineered Stick Strings for in-

creased resonance of sound. amplifier, and bass through another. There are two adjustable pick-up screws per string, which regulate the volume of each string. **The fret-board** is flat, rectangular, with no arch and no taper. There are 26 frets of largest size along its length, and a musical range of five and one-quarter octaves, from C below low E on bass to Eb above guitar. Scale length, bridge to nut, is 34", approximately the length of the longest electric basses.

Mother-of-Pearl inlays every five

frets indicate perfect fourth intervals

along the fret-board, providing visual reference for finger positions.

The winding heads are miniature, all metal, with a 14-to-1 gear ratio and smooth action — important for an instrument tuned at low tension.

The nut has two parts; the guide, which spaces the strings, and the top fret, upon which the strings lay.

The bridge is adjustable for height of each individual string to bring the action down as close as

possible to the frets. The bridge screws are threaded into the hard wood for a firm platform. Each string fits into the slot of its screw. The ten screws are configured in a modified "V" for true octaves on all strings up and down the board.

The tail-piece has ten slots into which eyelets of the ten strings fit.

Two truss rods of rigid, spring tempered steel are inlaid into the rear of the fret-board. These non-adjustable trusses are each a half

inch thick and are buried in black epoxy. They keep The Stick permanently straight, so that the string action can be set extremely close to the frets for playing speed.

The wood is Brazilian iron wood, a dense and stable material of unusual variety in grain, color, and texture. The wood is functionally sculptured into the Stick shape, with a trench for the pick-up housing to slide into. The finish is natural and hand-rubbed.

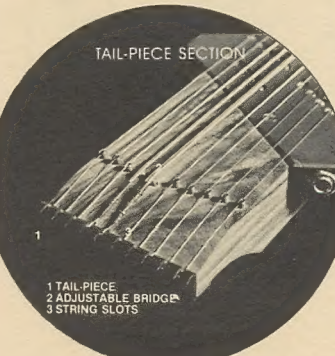
The ten strings are custom made for length, diameter, core diameter, flexibility, texture and materials. They are available in packaged sets of Stick Strings. String life is long, from three to five months, especially if the strings are cleaned over and under after playing. The strings last longer because the tension is low and the finger tapping execution is very light.

The belt-hook supports The Stick at a playing angle close to 30° from the vertical, with the neck-strap engaged. The hook also tilts the fret-board slightly upward, so that the player can easily see the strings and frets. The hook fits onto the player's belt and pants, centered, with the player's belt buckle moved over to the left.

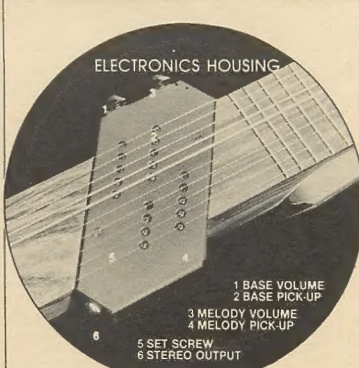
The neck-strap is worn under the player's right arm and over his left shoulder. The black denim and leather strap is adjustable with a buckle.

The pick-up housing assembly slides in and out of its trench by removing the two set screws, the strings remaining in place. The

metal housing shields all electric components from electrostatic hum and buzz. The housing is adjustable in height and closeness to the strings, and is pre-set at delivery. Adjustment is made by four screws on the rear, under the housing.



Stereo pick-ups inside the housing are comprised of four inductor coils with magnets and volume controls. Each pick-up has two coils wired to minimize hum. Each of the two groupings of five strings has its own underlying pick-up, with its own separate audio output signal. Melody can be played through one



inch thick and are buried in black epoxy. They keep The Stick permanently straight, so that the string action can be set extremely close to the frets for playing speed.



A velvet damper is at the first fret space to reduce noise caused by unintentional striking or releasing of strings. This space can nevertheless be played upon in the usual tapping-and-holding manner.

The case is of a slim, rectangular design, with a hard surface of mottled brown vinyl on plywood. The interiors of lid and box are of charcoal gray contoured foam, designed to protect The Stick from shock or pressure, giving the instrument a cushioned ride in transport.

A stereo patch cord with metal shielded plugs is included in the case. The two outputs can be plugged into either one or two amplifiers.

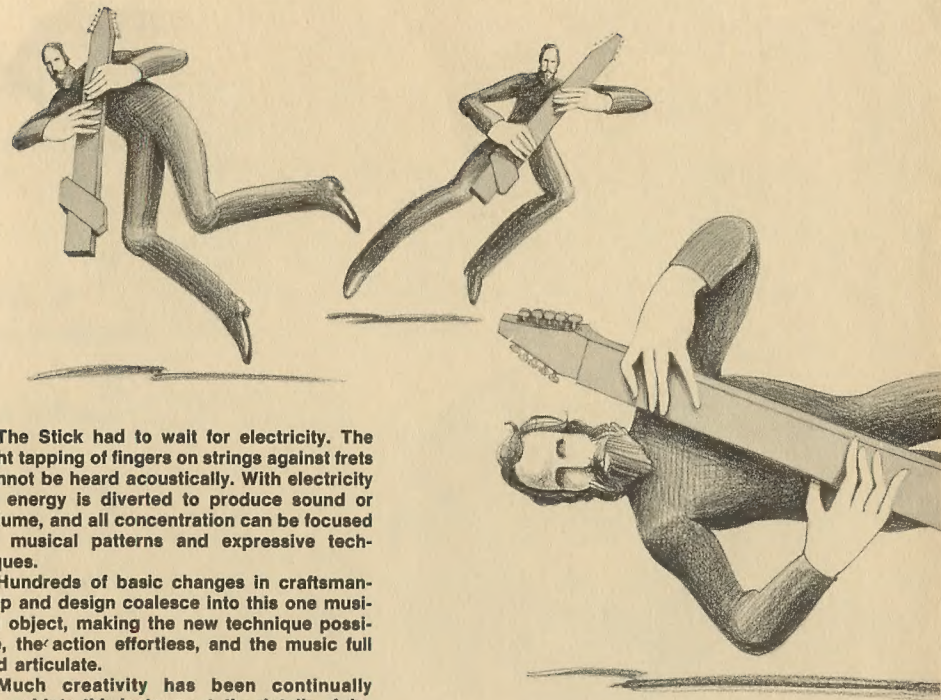
Each instrument is thoroughly tested and extensively played before shipment.

The Stick is totally functional in design, with no useless appendages or decorations. Hundreds of innovations in the stringed instrument craft have gone into its development, resulting in the essential Stick.

Manufacture is wholly within the United States, with final assembly at Stick Enterprises, Inc., in Los Angeles, CA. Only the best available materials are used in the manufacture of this product.

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THE STICK®



The Stick had to wait for electricity. The light tapping of fingers on strings against frets cannot be heard acoustically. With electricity no energy is diverted to produce sound or volume, and all concentration can be focused on musical patterns and expressive techniques.

Hundreds of basic changes in craftsmanship and design coalesce into this one musical object, making the new technique possible, the action effortless, and the music full and articulate.

Much creativity has been continually poured into this instrument, the details of design constantly being improved. For every hour spent in the invention, design, and development of this product, 99 hours have been spent playing it in practice, rehearsal and performance.

"Just about 5,000 years — that's the time it took for the Ravanastrom, the King of Ceylon's one-string, to develop ... into the American electric guitar. But now Emmett Chapman has opened a new chapter in the fretted-instrument saga: he's freed the right hand from its pick-bow-strum-role."

**Dr. William Fowler,
DOWN BEAT**

"When Emmett Chapman plays 'The Stick', it is unbelievable. This musical instrument invented and built by Emmett does not have the sophisticated electronic intonations of a synthesizer. The physical components are The Stick and an amplifier: the same simple set-up that the electric guitar player has. The eye of the hurricane lies in The Stick itself and how it's played."

Leon Block, MUSIC JOURNAL

"The sound of The Stick reminds me of clavichord. But the bass is funky. In the tuning there's an amazing combination between the fourths and fifths."

Miroslav Vitous

"During my tour of Europe with the Billy Cobham-George Duke Band I introduced The Stick to European audiences for the first time. I was amazed at people's immediate reactions, and how they were turned on to the sight and sound of this instrument."

As a musician I find Stick bass very convenient. It's easier to play the wider intervals, and it opens up possibilities in the bass for chords and various substitutions.

During my studio recording experiences I've noticed that the bass register of The Stick has a precision and a deep bottom end that I can't get from the normal electric bass.

Hopefully in the near future I'll be looking beyond the bass role of this instrument. Melodically and chordally, The Stick has ultimate capabilities in expanding my musical vocabulary."

Alphonso Johnson

"The Stick is the first full-range stringed instrument."

"As a violinist I find this instrument a colorful vehicle of expression. I feel physically close to the strings in a way not possible on keyboard."

"Although it's electric, it still feels acoustic when I plug it directly into the amps."

Michael Urbaniak

"A unique case where the inventor of a remarkable instrument is a remarkable musician as well."

Joe Zawinul



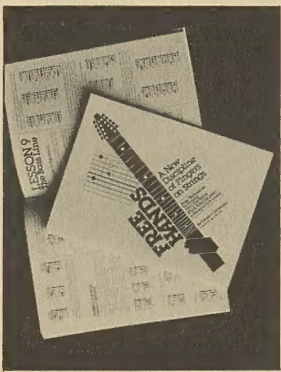
Instruction A lesson book entitled "Free Hands", by Emmett Chapman, is filled with fingering diagrams that graphically illustrate chords, scales, shapes and patterns for right and left hands.

These diagrams are a new form of tablature created by Emmett for Stick students.

The book organizes explanations and diagrams into a manual of composition theory and song arrangement applied to the Touch-board.

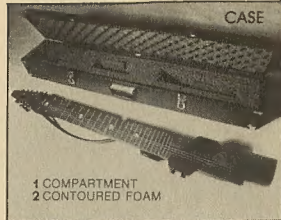
Emmett is available for personal instruction in Los Angeles, on tours, and at clinic/concert events at music stores nationally.

Some of his most proficient students are also active in music store clinics, and give personal lessons in various local areas around the country.



Purchases Prices for The Stick, case, instruction book, and accessories are shown on the attached price list. The instrument is delivered with strings attached and roughly in tune, with a stereo patch cord, and with a one-year guarantee against any defects.

Repair All repairs and parts replacements are handled through Stick Enterprises, Inc., in Los Angeles. Strings, stereo patch cords, cases, and all Stick components are available. Prompt repairs will be made, free of charge, according to the guarantee, on any and all defects in manufacture or materials. Shipment is at the owner's expense.



Strings Stick Strings, in packaged sets of ten, are specially engineered for resonance of sound when played in the usual tapping-and-holding manner.

Demo Tapes Tapes of Emmett demonstrating the music of The Stick are available as cassettes and as reel-to-reel copies through Stick Enterprises, Inc.

Some of these tapes are instructional, with Emmett explaining basic techniques and playing them in solo. Other tapes document Emmett's playing in solo, and in duo or trio with drums and horns.

Equipment Ideally The Stick should be played through two amplifiers, one for bass and one for melody. The bass amp should be tuned with extreme lows prominent for a good bottom end, and with some extreme highs for that clear attack sound of acoustic instruments. The melody amp should have a somewhat opposite profile, with the middle ranges prominent. Many other tuning configurations are workable on both bass and melody, giving unusual tonal qualities to the instrument.

The Stick can also be played through one amplifier. If the amp has two channels, then separate tuning of bass and melody is possible. If the amp has only one channel the bass volume control on The Stick must be turned down.

Many effects boxes and pedals on the market, designed for guitar and keyboards, are very desirable on Stick. Recommended for the melody output is wah, compressor, echo, flanger, phaser, and fuzz, and for the bass output, flanger and compressor.



STICK ENTERPRISES INC. □ 8320 Yucca Trail □ Los Angeles, California 90046 □ 213/656-6878

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**the
Stick®**
The Chapman STICK Touchboard®

In the evolution of stringed instruments, The Stick is a primary advance in design and playing technique.

Its innovation lies in the fundamentally new method in which the fingers and hands play upon the strings. A piano technique is brought to the guitar family with each hand playing independently, sketching the shapes of lines and chords. Both hands play simultaneously, structuring orchestral ideas, as on piano.

For the first time, strings and electricity are brought into their most effective interplay. Musical expression is as close to the mind as the touch of a finger.



"I've observed the reaction of the public on guided tours of The Harmonious Craft exhibit, and people are quite taken by the esthetics and the shape of it, and demand to know more."

**Alan Bassing, Curator,
RENWICK GALLERY
SMITHSONIAN INSTITUTION,**

"CLOSE TO THE ULTIMATE INSTRUMENT. It is designed to be a bass, chord, rhythm and lead instrument rolled into one, and when Emmett plays it, it is that in reality. I felt like applauding after bass and piano solos, but I was faced with the rather odd situation of seeing them all played by the same person! The Stick fingerboard (which is uniquely visible, allowing you to follow what the player does quite easily) tends to become the stage and the two hands become the musicians."

Bob Slone, PRIMO TIMES

"We believe Emmett Chapman and the 'Stick' are important to the present and future development of electric music and are proud to be the retailer of such an important new addition to the language of music."

**SAM ASH
MUSIC STORES, NEW YORK**

"The Chapman Stick is revolutionary in design, a possible forerunner of a new family of instruments engineered to be easily playable. The instrument has the ability to become as essential to the '70s as the guitar was in the '50s and the electric piano and organ are today."

**Arnold Jay Smith,
DOWN BEAT**

"... the potentially most important development of the decade in the realm of electric music."

**Peter Occhiogrosso,
THE SOHO WEEKLY NEWS**

"Such a totally unique instrument in the hands of such a talented and original musician is one of those rare artistic combinations that comes along seldom in a decade."

**Daniel Sawyer,
GUITAR PLAYER MAGAZINE**

"I was astonished by the variety of tones and moods he produced with it. At first, clear and full, like a deep, rich guitar. Then a gutsy fuzz tone with ferocious, Hendrix-like wah-wah punctuations, followed by a softer, muted effect, similar to an organ or electric piano. He also created blues sounds, with bass lines like Jack Bruce, and dirty melodic lines comparable to B.B. King's. The range and combinations of sounds Chapman creates seems endless."

**Lee Underwood,
LOS ANGELES WEEKLY NEWS**